A TABLE OF ATOMIC WEIGHTS

OF SEVENTY-FOUR ELEMENTS.

Compiled in April, 1899, from the most Recent Data.

BY THEODORE WILLIAM RICHARDS.

Name.	Symbol.	Atomic Weight.	Name.	Symbol.	Atomic Weight.
Aluminium . .	Al	27.1	Molybdenum .	Mo	96.0
Antimony . . .	Sb	120.0	Neodymium . .	Nd	143.6
Argon	A	39.9 ?	Nickel	Ni	58.70
Arsenic . . .	As	75.0	Niobium . . .	Nb = Cb	94.
Barium . . .	Ba	137.43	Nitrogen . . .	N	14.045
Beryllium . . .	Be = Gl	9.1	Osmium . . .	Os	190.8
Bismuth . . .	Bi	208.	Oxygen (standard)	O	16.000
Boron	B	10.95	Palladium . . .	Pd	106.5
Bromine . . .	Br	79.955	Phosphorus . .	P	31.0
Cadmium . . .	Cd	112.3	Platinum . . .	Pt	195.2
Cæsium . . .	Cs	132.9	Potassium . . .	K	39.140
Calcium . . .	Ca	40.1	Praseodymium .	Pr	140.5
Carbon	C	12.001	Rhodium . . .	Rh	103.0
Cerium . . .	Ce	140.	Rubidium . . .	Rb	85.44
Chlorine . . .	Cl	35.455	Ruthenium . .	Ru	101.7
Chromium . .	Cr	52.14	Samarium ? . .	Sm	150.
Cobalt	Co	59.00	Scandium . . .	Sc	44.
Columbium . .	Cb = Nb	94.	Selenium . . .	Se	79.2
Copper	Cu	63.60	Silicon	Si	28.4
"Didymium" .	Nd + Pr	142±	Silver	Ag	107.930
Erbium . .	Er	166.	Sodium . . .	Na	23.050
Fluorine . . .	F	19.05	Strontium . . .	Sr	87.68
Gadolinium ? .	Gd	156. ?	Sulphur . . .	S	32.065
Gallium . . .	Ga	70.0	Tantalum . . .	Ta	183.
Germanium . .	Ge	72.5	Tellurium . . .	Te	127.5 ?
Glucinum . . .	Gl = Be	9.1	Terbium ? . . .	Tb	160.
Gold	Au	197.3	Thallium . . .	Tl	204.15
Helium . . .	He	4.0 ?	Thorium . . .	Th	233.
Hydrogen . . .	H	1.0075	Thulium ? . . .	Tu	170. ?
Indium	In	114.	Tin	Sn	119.0
Iodine	I	126.85	Titanium . . .	Ti	48.17
Iridium . . .	Ir	193.0	Tungsten . . .	W	184.4
Iron	Fe	56.0	Uranium . . .	U	240.
Lanthanum . .	La	138.5	Vanadium . .	V	51.4
Lead	Pb	206.92	Ytterbium . .	Yb	173.
Lithium . . .	Li	7.03	Yttrium . . .	Yt	89 0
Magnesium . .	Mg	24.36	Zinc	Zn	65.40
Manganese . .	Mn	55.02	Zirconium . .	Zr	90.5
Mercury . . .	Hg	200.0			

(OVER)

NOTE.

SINCE the appearance of this table last year, the Committee of the German Chemical Society, Messrs. Landolt, Ostwald, and Seubert, have made their interesting report upon the subject, and have invited the chemists of the world to join them in deciding upon one standard to be used everywhere. The fulfilment of this very desirable end must necessarily be a matter of many months; hence the present table is republished this year in accordance with the original plan. It is to be distinctly understood that the republication is not in any way an attempt to compete with or to forestall the International Committee; it is merely an expression of opinion, which may be of temporary service. The fact that none of the other recent tables follow the accepted scientific usage concerning significant figures seems to afford an additional reason for reprinting this one.

The investigations of the past year have pointed to a change in four values given in the table of 1898. Calcium is made 40.1 instead of 40; for recent experiments (as yet unpublished) in this Laboratory indicate that last year's estimate was too low. Neo- and praseodymium were oddly transposed by their discoverer, and the more accurate values of Jones * and others are substituted. Lastly, Lenher's † careful investigation upon selenium seems to show that this element has a higher atomic weight than was formerly supposed to belong to it. For the present a compromise number, 79.2, is recorded above.

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* Am. Chem. Journ., XX. 345 (1898).

† Journ. Am. Chem. Soc., XX. 555 (1898). Compare Clarke, Ibid., XXI. 200 (1899).